

SEQUENCE LISTING

<110> Terumo Corporation
<120> Functional Hybrid Polypeptide with Collagen-binding
Activity
<130> 19990120
<140>
<141>
<160> 16
<170> PatentIn Ver. 2.0
<210> 1
<211> 343
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence:Modified Human
Fibronectin Collagen-Binding Domain
<220>
<221> INIT __MET
<222> (1)
<220>
<221> DOMAIN
<222> (2)..(341)
<223> /note="human fibronectin collagen-binding domain"
<220>
<221> CONFLICT
<222> (69)
<220>

<221> CONFLICT

<222> (125)

<400> 1

Met Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro Tyr

1 5 10 15

Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met Gln

20 25 30

Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu Gly

35 40 45

Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr Tyr Gly Gly

50 55 60

Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Gly Arg

65 70 75 80

Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg Gln Asp Gly His Leu Trp

85 90 95

Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser Phe Cys

100 105 110

Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser Asn Gly

115 120 125

Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr Asp

130 135 140

Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr Thr

145 150 155 160

Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala Ala

165 170 175

His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr Arg Ile Gly

180 185 190

Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg Cys Thr
 195 200 205
 Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln
 210 215 220
 Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn Val Asn Asp
 225 230 235 240
 Thr Phe His Lys Arg His Glu Glu Gly His Met Leu Asn Cys Thr Cys
 245 250 255
 Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys Asp Pro Val Asp Gln Cys
 260 265 270
 Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln Ile Gly Asp Ser Trp Glu
 275 280 285
 Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys Tyr Gly Arg Gly
 290 295 300
 Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro Ser Ser Ser
 305 310 315 320
 Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln Pro Asn Ser
 325 330 335
 His Pro Ile Gln Trp Leu Glu
 340

<210> 2

<211> 159

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human Basic

Fibroblast Growth Factor with Enterokinase

Recognition Sequence

<220>

<221> PEPTIDE

<222> (1)..(5)

<223> /note="enterokinase recognition sequence"

<220>

<221> PEPTIDE

<222> (6)..(159)

<223> /note="human fibroblast growth factor"

<400> 2

```

Asp Asp Asp Asp Lys Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala Leu
 1             5             10            15
Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp
          20             25             30
Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His
          35             40             45
Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile
          50             55             60
Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly
 65             70             75             80
Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu
          85             90             95
Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu
          100            105            110
Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr
          115            120            125
Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly

```

130 135 140
 Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser
 145 150 155
 <210> 3
 <211> 58
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Human Epidermal
 Growth Factor with Enterokinase Recognition
 Sequence
 <220>
 <221> PEPTIDE
 <222> (1)..(5)
 <223> /note="enterokinase recognition sequence"
 <220>
 <221> PEPTIDE
 <222> (6)..(58)
 <223> /note="human epidermal growth factor"
 <400> 3
 Asp Asp Asp Asp Lys Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp
 1 5 10 15
 Gly Tyr Cys Leu His Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp
 20 25 30
 Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln
 35 40 45
 Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg

50

55

<210> 4

<211> 501

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Hybrid

Polypeptide of Human Fibronectin Collagen-Binding

Domain and Human Basic Fibroblast Growth Factor

<220>

<221> INIT __MET

<222> (1)

<220>

<221> DOMAIN

<222> (2)..(341)

<223> /note="human fibronectin collagen-binding domain"

<220>

<221> PEPTIDE

<222> (343)..(347)

<223> /note="enterokinase recognition sequence"

<220>

<221> PEPTIDE

<222> (348)..(501)

<223> /note="human fibroblast growth factor"

<400> 4

Met Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro Tyr

1

5

10

15

Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met Gln
 20 25 30
 Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu Gly
 35 40 45
 Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr Tyr Gly Gly
 50 55 60
 Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Gly Arg
 65 70 75 80
 Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg Gln Asp Gly His Leu Trp
 85 90 95
 Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser Phe Cys
 100 105 110
 Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser Asn Gly
 115 120 125
 Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr Asp
 130 135 140
 Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr Thr
 145 150 155 160
 Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala Ala
 165 170 175
 His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr Arg Ile Gly
 180 185 190
 Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg Cys Thr
 195 200 205
 Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln
 210 215 220
 Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn Val Asn Asp

Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg
 450 455 460
 Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys
 465 470 475 480
 Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro
 485 490 495
 Met Ser Ala Lys Ser
 500

<210> 5

<211> 400

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Hybrid

Polypeptide of Human Fibronectin Collagen-Binding
 Domain and Human Epidermal Growth Factor

<220>

<221> INIT __MET

<222> (1)

<220>

<221> DOMAIN

<222> (2)..(341)

<223> /note="human fibronectin collagen-binding domain"

<220>

<221> PEPTIDE

<222> (343)..(347)

<223> /note=" enterokinase recognition sequence"

<220>

<221> PEPTIDE

<222> (348)..(400)

<223> /note="human epidermal growth factor"

<400> 5

Met Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro Tyr

1 5 10 15

Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met Gln

20 25 30

Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu Gly

35 40 45

Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr Tyr Gly Gly

50 55 60

Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Gly Arg

65 70 75 80

Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg Gln Asp Gly His Leu Trp

85 90 95

Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser Phe Cys

100 105 110

Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser Asn Gly

115 120 125

Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr Asp

130 135 140

Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr Thr

145 150 155 160

Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala Ala

165 170 175

His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr Arg Ile Gly
 180 185 190
 Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg Cys Thr
 195 200 205
 Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln
 210 215 220
 Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn Val Asn Asp
 225 230 235 240
 Thr Phe His Lys Arg His Glu Glu Gly His Met Leu Asn Cys Thr Cys
 245 250 255
 Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys Asp Pro Val Asp Gln Cys
 260 265 270
 Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln Ile Gly Asp Ser Trp Glu
 275 280 285
 Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys Tyr Gly Arg Gly
 290 295 300
 Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro Ser Ser Ser
 305 310 315 320
 Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln Pro Asn Ser
 325 330 335
 His Pro Ile Gln Trp Leu Asp Asp Asp Asp Lys Asn Ser Asp Ser Glu
 340 345 350
 Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His Asp Gly Val Cys Met
 355 360 365
 Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn Cys Val Val Gly Tyr
 370 375 380
 Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys Trp Trp Glu Leu Arg

385	390	395	400
<210> 6			
<211> 49			
<212> DNA			
<213> Artificial Sequence			
<220>			
<223> Description of Artificial Sequence:PCR Sense			
Primer for Human Fibronectin Collagen-Binding			
Domain			
<400> 6			
gaggtacat ggtacatatg gcagctgttt accaaccgca gcctcaccc			49
<210> 7			
<211> 46			
<212> DNA			
<213> Artificial Sequence			
<220>			
<223> Description of Artificial Sequence:PCR Antisense			
Primer for Human Fibronectin Collagen-Binding			
Domain			
<220>			
<400> 7			
cgggatcctt actcgagcca ctggatgggg tgggagtgg gctgac			46
<210> 8			
<211> 1053			
<212> DNA			
<213> Artificial Sequence			
<220>			

<223> Description of Artificial Sequence: Modified Human

Fibronectin Collagen-Binding Domain

<220>

<221> conflict

<222> (109)

<220>

<221> conflict

<222> (206)

<220>

<221> conflict

<222> (270)

<220>

<221> conflict

<222> (374)

<220>

<221> conflict

<222> (681)

<400> 8

ggtaccatgg tacatatggc agctgtttac caaccgcagc ctcaccccca gcctctctccc 60
 tatggccact gtgtcacaga cagtgggtgtg gtctactctg tggggatgca gtggctgaag 120
 acacaaggaa ataagcaaat gctttgcacg tgccctgggca acggagtcag ctgccaaagag 180
 acagctgtaa cccagactta cgggtggcaac tcaaatggag agccatgtgt cttaccattc 240
 acctacaatg gcaggacgtt ctactcctgc accacagaag ggcgacagga cggacatctt 300
 tgggtgcagca caacttcgaa ttatgagcag gaccagaaat actctttctg cacagaccac 360
 actgtttttg ttcagactcg aggaggaaat tcaatgggtg ctttgtgcca cttccccttc 420
 ctatacaaca accacaatta cactgattgc acttctgagg gcagaagaga caacatgaag 480
 tgggtgtggga ccacacagaa ctatgatgcc gaccagaagt ttgggttctg ccccatggct 540

gccacagagg aaatctgcac aaccaatgaa ggggtcatgt accgcattgg agatcagtgg 600
 gataagcagc atgacatggg tcacatgatg aggtgcacgt gtgttgggaa tggctcgtggg 660
 gaatggacat gcattgccta ctgcagcgtt cgagatcagt gcattgttga tgacatcact 720
 tacaatgtga acgacacatt ccacaagcgt catgaagagg ggcacatgct gaactgtaca 780
 tgcttcggtc agggctgggg caggtggaag tgtgatcccg tcgaccaatg ccaggattca 840
 gagactggga cgttttatca aattggagat tcattgggaga agtatgtgca tgggtgcaga 900
 taccagtgtc actgctatgg ccgtggcatt ggggagtggc attgccaacc ttacagacc 960
 tatccaagct caagtggtcc tgtcgaagta tttatcactg agactccgag tcagcccaac 1020
 tccacccca tccagtggct cgagtaagga tcc 1053

<210> 9

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR Sense

Primer for Human Basic Fibroblast Growth Factor

<400> 9

gagtcgacga cgatgataag gcagccggga gcataccac 40

<210> 10

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR Antisense

Primer for Human Basic Fibroblast Growth Factor

<400> 10

ggaattctca gctcttagca gacattggaa g 31

<210> 11

<211> 489

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human Basic

Fibroblast Growth Factor with Enterokinase

Recognition Sequence

<220>

<221> mutation

<222> (228)

<223> /note="mutation caused by polymerase chain
reaction"

<400> 11

```
gtcgacgacg atgataaggc agccggggagc atcaccacgc tgcccgccct gcccgaggat 60
ggcggcagcg gcgccttccc gcccgggccac ttcaaggacc ccaagcggct gtactgcaaa 120
aacggggggt tcttcctgcg catccacccc gacggccgag ttgacggggt cggggagaag 180
agcgaccctc acatcaagct acaacttcaa gcagaagaga gaggagtcgt gtctatcaaa 240
ggagtgtgtg ctaaccgtta cctggctatg aaggaagatg gaagattact ggcttctaaa 300
tgtgttacgg atgagtgttt cttttttgaa cgattggaat ctaataacta caatacttac 360
cggtaagga aataaccagc ttggtatgtg gcaactgaaac gaactgggca gtataaactt 420
ggatccaaaa caggaccttg gcagaaagct atactttttc ttccaatgtc tgctaagagc 480
tgagaattc                                     489
```

<210> 12

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR Sense

Primer for Human Epidermal Growth Factor

<400> 12

gtgtcgacga cgaatgataag aatagtgact ctgaatgtcc cctg 44

<210> 13

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR Antisense

Primer for Human Epidermal Growth Factor

<400> 13

gaattctttag cgcagttccc accacttcag 30

<210> 14

<211> 186

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Human Epidermal

Growth Factor with Enterokinase Recognition

Sequence

<400> 14

gtcgacgacg atgataagaa tagtgactct gaatgtcccc tgtcccacga tgggtactgc 60
ctccatgatg gtgtgtgcat gtatatggaa gcattggaca agtatgcatg caactgtgtt 120
gttggtaca tcggggagcg atgtcagtac cgagacctga agtsgtggga actgcgctaa 180
gaattc 186

<210> 15

<211> 1527

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Hybrid

Polypeptide of Human Fibronectin Collagen-Binding

Domain and Human Fibroblast Growth Factor

<400> 15

ggtaccatgg tacatatggc agctgtttac caaccgcagc ctacacccca gcctcctccc 60
 tatggccact gtgtcacaga cagtgggtgt gtctactctg tggggatgca gtggtgaag 120
 acacaaggaa ataagcaaat gctttgcacg tgccctgggca acggagtcag ctgccaagag 180
 acagctgtaa ccagacatta cgggtggcaac tcaaatggag agccatgtgt cttaccattc 240
 acctacaatg gcagacgatt ctactcctgc accacagaag ggcgacagga cggacatctt 300
 tgggtgcagca caacttcgaa ttatgagcag gaccagaaat actctttctg cacagaccac 360
 actgttttgg ttcagactcg aggaggaaat tccaatgggt ccttgtgcca ctcccccttc 420
 ctatacaaca accacaatta cactgattgc acttctgagg gcagaagaga caacatgaag 480
 tgggtgtggga ccacacagaa ctatgatgcc gaccagaagt ttgggttctg ccccatggct 540
 gccccagagg aaactctcac aaccaatgaa ggggtcatgt accgcattgg agatcagtgg 600
 gataagcagc atgacatggg tcacatgatg aggtgcacgt gtgttgggaa tggctgtggg 660
 gaatggacat gcattgccta ctgcagcctt cgagatcagt gcattgttga tgacatcact 720
 tacaatgtga acgacacatt ccacaagcgt catgaagagg ggcacatgct gaactgtaca 780
 tgcttcggtc agggtcgggg cagggtgaag tgtgatcccc tcgaccaatg ccaggattca 840
 gagactggga cgttttatca aattggagat tcatgggaga agtatgtgca tgggtgcaga 900
 taccagtgtc actgtctatg ccgtggcatt ggggagtggc attgccaacc ttacagacc 960
 tatccaagct caagtgtgac tgtcgaagta tttatcactg agactccgag tcagcccaac 1020
 tcccacccca tccagtggct cgacgacgat gataaggcag cggggagcat caccacgtg 1080

cccgccttgc ccgaggatgg cggcagcggc gccttcccgc ccggccactt caaggacccc 1140
 aagcggctgt actgcaaaaa cgggggcttc ttctgcgcga tcaccccga cggccgagtt 1200
 gacgggggtcc gggagaagag cgacctcac atcaagctac aactcaagc agaagagaga 1260
 ggagtgcgtg ctatcaaagg agtgtgtgct aaccgttacc tggctatgaa ggaagatgga 1320
 agattactgg ctctctaaatg tgttacggat gagtgtttct tttttgaacg attggaatct 1380
 aataactaca atacttaccg gtcaaggaaa tacaccagtt ggtatgtggc actgaaacga 1440
 actgggcagt ataaacttgg atccaaaaca ggacctgggc agaaagctat actttttctt 1500
 ccaatgtctg ctaagagctg agaattc 1527

<210> 16

<211> 1224

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Hybrid

Polypeptide of Human Fibronectin Collagen-Binding

Domain and Human Epidermal growth factor

<400> 16

ggtaccatgg tacatatggc agctgtttac caaccgcagc ctcaccccca gcctcctccc 60
 tatggccact gtgtcacaga cagtgggtgtg gtctactctg tggggatgca gtggctgaag 120
 acacaaggaa ataagcaaat gctttgcacg tgccctgggca acggagtcag ctgccaaag 180
 acagctgtaa cccagactta cggtaggcaac tcaaatggag agccatgtgt cttaccattc 240
 acctacaatg gcaggacgtt ctactcctgc accacagaag ggccagcaga cggacatctt 300
 tgggtgcagca caacttcgaa ttatgagcag gaccagaaat actctttctg cacagaccac 360
 actgttttgg ttcagactcg aggaggaaat tccaatgggt ctttgtcca cttccccttc 420
 ctatacaaca accacaatta cactgattgc acttctgagg gcagaagaga caacatgaag 480
 tgggtgtggga ccacacagaa ctatgatgcc gaccagaagt ttgggttctg ccccatgget 540
 gccccagagg aaatctgcac aaccaatgaa ggggtcatgt accgcattgg agatcagtgg 600

gataagcagc atgacatggg tcacatgatg aggtgcacgt gtgttgggaa tggtcgtggg 660
 gaatggacat gcattgccta ctgcagcctt cgagatcagt gcattgttga tgacatcact 720
 tacaatgtga acgacacatt ccacaagcgt catgaagagg ggcacatgct gaactgtaca 780
 tgcttcggtc agggtcgggg caggtggaag tgtgatcccg tcgaccaatg ccaggattca 840
 gagactggga cgttttatca aattggagat tcatgggaga agtatgtgca tgggtgtcaga 900
 taccagtgtc actgctatgg cgtggcatt ggggagtggc attgccaacc ttacagacc 960
 tatccaagct caagtggtec tgtcgaagta tttatcactg agactccgag tcagcccaac 1020
 tcccaccca tccagtggct cgacgacgat gataagaata gtgactctga atgtccctg 1080
 tcccacgatg ggtactgcct ccatgatggt gtgtgcatgt atattgaagc attggacaag 1140
 tatgcatgca actgtgtgtg tggctacatc ggggagcgt gtcagtaccg agacctgaag 1200
 tgggtggaac tgcetaaga attc 1224

1224
 1200
 1180
 1160
 1140
 1120
 1100
 1080
 1060
 1040
 1020
 1000
 980
 960
 940
 920
 900
 880
 860
 840
 820
 800
 780
 760
 740
 720
 700
 680
 660
 640
 620
 600
 580
 560
 540
 520
 500
 480
 460
 440
 420
 400
 380
 360
 340
 320
 300
 280
 260
 240
 220
 200
 180
 160
 140
 120
 100
 80
 60
 40
 20
 0